load. The softer (and steeper) the ground and the thicker the vegetation, the higher the energy expenditure and the sooner speed of movement declines. Marching all night and attacking all day makes for good reading, but in reality sets the stage for defeat.

After assessing these various planning considerations, smart commanders can determine the amount of equipment that

will be needed for a specific operation. And once they have identified the load, they can more wisely distribute the equipment throughout the force to reserve the soldiers' energy.

Commanders who take all of these factors into consideration can formulate realistic movement plans that will give their tactical plans the greatest possibility of success. Lieutenant Colonel John S. O'Conner, an Infantry officer, is Director of Training at the U S. Army Physical Fitness School, Fort Benjamin Harrison, Indiana. He has served in a variety of infantry units including service in Vietnam. He holds a PhD in Exercise Physiology.

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Improving the Division LRSU

MAJOR THOMAS M. JORDAN

Having recently commanded a long range surveillance unit (LRSU) in Europe, I feel a need to voice publicly some thoughts regarding organization, doctrine, force structure, and equipment problems associated with the division long range surveillance unit. My intent is to focus on what I consider major shortfalls and to suggest some solutions that we initiated and others that could solve the problems.

First, the current TOE design, which requires a divisional LRS unit to be a detachment (assigned to the headquarters and headquarters service company of the military intelligence (MI) battalion), is clearly unworkable. In fact, I knew of no LRS unit in Europe that actually operated as a detachment. Most were designated Company D in the MI battalion, as ours was, and operated as such. This gave us a much greater ability to plan, train, and execute missions; provide for administration; and create an atmosphere of excellence.

As a commander, I relied almost exclusively on Field Manual (FM) 7-93 and its related mission training plan, ARTEP 7-93-MTP, to provide the doctrinal basis for training and assessing the company. These two manuals provided invaluable assistance in terms of developing long

and short range plans, a company SOP, and training exercises.

Basically, our company operated as described in the manual. We had a forward base consisting of the company operations cell and 31C communicators (single-channel radio operators), a rear base consisting of four or five 31Cs plus equipment, and six surveillance teams.

ORGANIZATION

I became an enthusiastic supporter of the earlier decision to move LRS units from the cavalry squadron to the MI battalion. This enabled key signal intelligence (SIGINT) and human intelligence (HUMINT) collection units to be colocated under one command and control system, which improved the synchronization of their respective efforts.

During REFORGER 88, we did not co-locate our LRS command post and forward base with the division tactical operations center (DTOC) as FM 7-93 discusses. If we had done so, the military intelligence battalion would have been shortchanged in the command and control synchronization and collection processes.

We found it much more effective to lo-

cate within sight of the battalion headquarters, to transmit our reports to the battalion and the DTOC by the radio teletype with backup communications to the battalion by messenger and PSC-2 (a new device that allows a sender to type a message and burst it to a receiving station using FM radio waves). As reports flowed in to the battalion, the most urgent of them were communicated to the DTOC from the S-2 by pulse control modulation (PCM).

There were several advantages to this system:

- •Our logistical support was from our parent unit, not from an already overburdened division headquarters and headquarters company.
- •The MI battalion commander, the G-2, and the LRS commander were able to select missions on the basis of a clear intelligence picture, and the MI commander and staff were not cut out of the collection process.
- •The SIGINT missions could be better coordinated with the HUMINT missions.
- •The LRS forward base and command post did not have to tear down communications with every DTOC jump and could maintain an extremely small signature.

•The DTOC and the MI battalion operations centers received LRS collection data almost simultaneously.

The prescribed six teams are not enough to support a division's requirements. Exercises such as REFORGER clearly indicate the tremendous intelligence payoff that LRS teams can provide. But the tactical situation in such exercises often dictated that we deploy all six teams, and once we did our ability to either move the teams to different positions or react to new situations was reduced or lost.

I believe, therefore, that divisional units should have eight teams consisting of two platoons of four teams each. The platoons should be commanded by second lieutenants. This would improve training and command and control, and would allow greater flexibility and provide for more realistic operational requirements.

The current TOE also creates some other personnel and equipment problems.

Our division augmented the company with an executive officer, an operations sergeant, and a supply sergeant. The XO and the supply sergeant have been integrated into the upcoming MTOE (modified TOE) as authorized positions, but the TOE also needs to reflect an armorer, an NBC NCO, a supply clerk, an operations sergeant, and an intelligence sergeant. In addition, the detachment sergeant position, now authorized platoon sergeant rank, should be upgraded to first sergeant rank.

Chief among personnel problems in operating the company are replacements and training. The long range surveillance skill carries a Q6 identifier; when I turned over command, my unit had only three graduates from the Fort Benning LRS Course. All too often, particularly in a Bradley-equipped division, we were forced to interview 11M and 11H volunteers for team positions. Although these highly motivated soldiers eventually paid great dividends, in the beginning our training program had to make up for their total lack of LRS experience.

Currently, an LRS team consists of six soldiers—five 11B infantryman and one 31C radio operator. I believe team leaders and assistant team leaders should be

11B3VQ6s, infantrymen with airborne, Ranger, and LRS training. (The current MTOE authorizes airborne and Ranger qualification for the team leader but only airborne qualification for the assistant team leader.) We found than an average 11B noncommissioned officer could not handle the team leader position unless he had an extensive light infantry background.

Too, our 31C enlisted soldiers were not trained on the type of radios we used (HF 104), and many of them could not adapt to the demanding physical standards. This was even more true of the



31C NCOs, whose experience typically consisted of operating a radio teletype-writer.

In fact, because of personnel shortages, most of the team radio operator positions were filled by infantrymen, and the infantrymen in our unit often knew more about HF radio communications than the 31C soldiers. Our communication requirements were the same for the deployed teams and for the two base stations that were staffed by 31Cs.

For these reasons, I believe the 31C MOS should be eliminated from the LRS teams. To make this an acceptable solution, however, and to help alleviate the training burden, all assigned NCOs and soldiers should have the specific LRS identifiers, or they should successfully complete the training for their job requirements before they arrive in the unit.

The major problem with the TOE in regard to equipment is that the unit lacks

the organic vehicles it needs to move soldiers. Consequently, transportation must be obtained for training missions, field deployments, and insertions or extractions that do not involve helicopter support. Even moving to an airfield or an isolated planning location poses a difficult problem, because the MI battalion has no support platoon and is sorely pressed to provide this support.

Because of the widespread deployment that is characteristic of an LRS company, the problem is amplified. For example, during REFORGER, our teams were spread 60 kilometers across the division front and 50 kilometers behind enemy lines with our two base stations about 175 kilometers apart.

Unquestionably, the divisional LRS unit TOE should require at least two five-ton trucks, and the division should strongly consider dedicated air support as well. A minimum solution would be two Black Hawk helicopters.

In addition, the TOE needs to authorize a lightweight, secure, internal team radio; an Army-issued telescope with at least 30-power magnification; easily assembled, lightweight HF antennas; a device to measure power output for the base station radios; a silenced weapon for each team; and M-8 chemical agent alarms that would be used at base station sites. These equipment deficiencies now plague the LRS units and force them either to purchase some of these items locally when funds are available or to go on relying on antiquated equipment.

I am confident that the current LRS units can perform their wartime mission. When their reporting can be correlated with a signal intelligence capability, they can provide timely and accurate intelligence to the decision makers.

The suggestions offered here are based on a combination of doctrine and hardearned experience. They are offered in the spirit of improving the current organization's capacity to perform.

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